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On September 18, 2003 (Date of Deposit)  
DA-18-2003 (Signature)

PATENT

Attorney Docket No. 8401 02  
RW Ref. No. APM/001-02-CP2



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Kenneth COLLINS, et al. ) Group Art Unit: Unknown  
Entitled: PLASMA IMMERSION ION ) Examiner: Unknown  
IMPLANTATION PROCESS USING A )  
PLASMA SOURCE HAVING LOW DISSOCIATION )  
AND LOW MINIMUM PLASMA VOLTAGE )  
Serial No.: 10/646,533 )  
Filing Date: August 22, 2003 )

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97(b)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached hereto is Form PTO-1449 listing documents believed relevant to the subject application. It is respectfully requested that these documents be made of record and an initialed copy of each form be returned to the undersigned.

No representation is made that more pertinent material is not available or should not be considered by the Examiner. It is expected that the Patent and Trademark Office will independently conduct a complete search of appropriate art. Furthermore, no admission is being made that these documents are prior art, and applicant reserves the right to challenge any such consideration.

It is believed that this disclosure complies with the requirements of 37 CFR 1.56, 1.97, and 1.98, and the Manual of Patent Examining Procedures, section 609 and 707.05. If for some reason the Examiner considers otherwise, it is respectfully requested that the undersigned be called so that any deficiencies can be remedied.

A copy of each document is enclosed unless indicated otherwise. Some of the documents may have markings on them. No significance is meant to be attached to the markings. These documents are not necessarily analogous art.

Respectfully submitted,



Dated: 01-18-2003

Robert M. Wallace  
Registration No. 29,119  
Attorney for Applicants

Robert M. Wallace  
Patent Counsel  
2112 Eastman Avenue, Suite 102  
Ventura, CA 93003  
(805) 644-4035

INFORMATION  
DISCLOSURE  
STATEMENT BY APPLICANT

Sheet 1 of 6

Application Number: 10/646,533  
 Filing Date: August 22, 2003  
 First Named Inventor: Kenneth COLLINS, et al.  
 Group Art Unit: Unknown  
 Examiner Name: Unknown  
 Attorney Docket Number: 008401 02



U. S. PATENT DOCUMENTS

Examiner Initials	Document No	Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date
	US-2,344,138	03-14-1944	DRUMMOND	117	107	05-20-1940
	US-3,109,100	10-29-1963	GECEWICZ	250	219	05-19-1960
	US-3,576,685	04-27-1971	SWANN ET AL.	148	187	03-15-1968
	US-3,907,616	09-23-1975	WIEMER	148	188	08-16-1974
	US-4,116,791	09-26-1978	ZEGA	204	192	05-18-1977
	US-4,382,099	05-03-1983	LEGGE ET AL.	427	34	10-26-1981
	US-4,385,946	05-31-1983	FINEGAN ET AL.	148	175	06-19-1981
	US-4,434,036	02-28-1984	HOERSCHELMANN ET AL.	204	164	05-03-1982
	US-4,465,529	08-14-1984	ARIMA ET AL.	148	188	06-04-1982

FOREIGN PATENT DOCUMENTS

Examiner Initials	Foreign Patent Document	Publication Date	Country	Name of Patentee or Applicant of Cited Document	Translation? (Yes/No/n/a)
	EP 0 546 852 A1	16.06.1993	EUROPE	CHARLES ZAROWIN ET AL.	N/A
	EP 0 836 218 A2	15.04.1998	EUROPE	SERGIO EDELSTEIN ET AL.	N/A
	EP 0 964 074 A2	15.12.1999	EUROPE	ALEC DENHOLM ET AL.	N/A
	EP 1 111 084 A1	27.06.2001	EUROPE	JAMES BERNSTEIN ET AL.	N/A
	EP 1 191 121 A1	27.03.2002	EUROPE	MICHELANGELO DELFINO	N/A

Examiner Initials

NON PATENT LITERATURE DOCUMENTS

Zhang, B.C., and Cross, R.C., "A high power radio frequency transformer for plasma production," *Rev. Sci. Instrum.*, Vol. 69, No. 1, pp. 101-108, January 1998.

U.S. Patent Application Serial No.: 09/638,075, filed August 11, 2000, entitled, "EXTERNALLY EXCITED TOROIDAL PLASMA SOURCE," By Hiroji Hanawa, et al.

Examiner's Signature:

Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION  
DISCLOSURE  
STATEMENT BY APPLICANT  
Sheet 2 of 6

Application Number: 10/646,533  
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 First Named Inventor: Kenneth COLLINS, et al.  
 Group Art Unit: Unknown  
 Examiner Name: Unknown  
 Attorney Docket Number: 008401 02



U. S. PATENT DOCUMENTS

Examiner Initials	Document No	Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date
	US-4,481,229	11-06-1984	SUZUKI ET AL.	427	38	06-20-1983
	US-4,500,563	02-19-1985	ELLENBERGER ET AL.	427	38	12-15-1982
	US-4,521,441	06-04-1985	FLOWERS	427	38	12-19-1983
	US-4,539,217	09-03-1985	FARLEY	427	10	06-27-1984
	US-4,565,588	01-21-1986	SEKI ET AL.	148	186	10-10-1984
	US-4,698,104	10-06-1987	BARKER ET AL.	437	141	03-02-1987
	US-4,764,394	08-16-1988	CONRAD	427	38	01-20-1987
	US-4,778,561	10-18-1988	GHANBARI	156	643	10-30-1987
	US-4,867,859	09-19-1989	HARADA ET AL.	204	298	08-04-1987
	US-4,871,421	10-03-1989	OGLE ET AL.	156	643	09-15-1988
	US-4,912,065	05-27-1990	MIZUNO ET AL.	437	141	05-26-1988
	US-4,937,205	06-26-1990	NAKAYAMA ET AL.	437	165	08-04-1988
	US-4,948,458	08-14-1990	OGLE	156	643	08-14-1990
	US-5,061,838	10-29-1991	LANE ET AL.	219	121.59	06-23-1989

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Examiner Initials	Foreign Patent Document	Publication Date	Country	Name of Patentee or Applicant of Cited Document	Translation? (Yes/No/n/a)
	JP 59-218728	10.12.1984	JAPAN	UNKNOWN	NO
	JP 59-86214	18.5.1984	JAPAN	UNKNOWN	NO
	JP 62-120041	1.6.1987	JAPAN	UNKNOWN	NO
	WO 93/18201	16.09.2003	WIPO	FELCH ET AL.	N/A

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	

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INFORMATION  
DISCLOSURE  
STATEMENT BY APPLICANT

Sheet 3 of 6

Application Number: 10/846,533  
 Filing Date: August 22, 2003  
 First Named Inventor: Kenneth COLLINS, et al.  
 Group Art Unit: Unknown  
 Examiner Name: Unknown  
 Attorney Docket Number: 008401 02

U. S. PATENT DOCUMENTS

Examiner Initials	Document No	Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date
	US-5,106,827	04-21-1992	BORDEN ET AL.	505	1	02-05-1991
	US-5,107,201	04-21-1992	OGLE	324	72.5	12-11-1990
	US-5,270,250	12-14-1993	MURAI ET AL.	437	165	12-23-1991
	US-5,277,751	01-11-1994	OGLE	156	643	06-18-1992
	US-5,290,382	03-01-1994	ZAROWIN ET AL.	156	345	12-13-1991
	US-5,312,778	05-17-1994	COLLINS ET AL.	437	225	11-23-1990
	US-5,354,381	10-11-1994	SHENG	118	723	05-07-1993
	US-5,435,881	07-25-1995	OGLE	156	345	03-17-1994
	US-5,505,780	04-09-1996	DALVIE ET AL.	118	723	03-18-1992
	US-5,514,603	05-07-1996	SATO	437	16	05-06-1994
	US-5,520,209	05-28-1996	GOINS ET AL.	137	246	12-03-1993
	US-5,542,559	08-06-1996	KAWAKAMI ET AL.	216	67	02-14-1994
	US-5,561,072	10-01-1996	SAITO	437	24	11-21-1994
	US-5,569,363	10-29-1996	BAYER ET AL.	204	192.32	10-25-1994
	US-5,572,038	11-05-1996	SHENG ET AL.	250	492.21	05-07-1993

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Examiner Initials	Foreign Patent Document	Publication Date	Country	Name of Patentee or Applicant of Cited Document	Translation? (Yes/No/n/a)
	WO 99/00832	07.01.1999	WIPO	DONALD SMITH ET AL.	N/A
	WO 01/11651 A1	15.02.2001	WIPO	LEONARD MAHONEY ET AL.	N/A
	WO 02/25694 A2	28.03.2002	WIPO	JAMES BERNSTEIN ET AL.	N/A

NON PATENT LITERATURE DOCUMENTS

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number: 10/646,533 Filing Date: August 22, 2003 First Named Inventor: Kenneth COLLINS, et al. Group Art Unit: Unknown Examiner Name: Unknown Attorney Docket Number: 008401 02	OTPE SEP 22 2003 PATENT & TRADEMARK OFFICE SINGAPORE
Sheet 4 of 6			

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	US-5,587,038	12-24-1996	CECCHI ET AL.	156	345	06-16-1994
	US-5,627,435	05-06-1997	JANSEN ET AL.	315	111.21	02-15-1996
	US-5,648,701	06-15-1997	HOOKE ET AL.	315	111.21	06-28-1994
	US-5,654,043	08-05-1997	SHAO ET AL.	427	527	10-10-1996
	US-5,674,321	10-07-1997	PU ET AL.	118	723	04-28-1995
	US-5,683,517	11-04-1997	SHAN	118	723	06-07-1995
	US-5,711,812	01-27-1998	CHAPEK ET AL.	118	723	06-06-1995
	US-5,718,798	02-17-1998	DEREGIBUS	156	429	04-10-1996
	US-5,770,982	06-23-1998	MOORE	333	32	10-29-1996
	US-5,897,752	04-27-1999	HONG ET AL.	204	192.12	05-20-1997
	US-5,911,832	06-15-1999	DENHOLM ET AL.	118	723	01-09-1997
	US-5,935,077	08-10-1999	OGLE	600	504	08-14-1997
	US-5,944,942	08-31-1999	OGLE	156	345	03-04-1998
	US-5,948,168	09-07-1999	SHAN ET AL.	118	723	10-09-1997
	US-5,994,236	11-30-1999	OGLE	438	728	01-23-1998

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U. S. PATENT DOCUMENTS						
Examiner Initials	Document No	Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date
	US-5,994,236	11-30-1999	OGLE	438	728	01-23-1998
	US-5,998,933	12-07-1999	SHUN'KO	315	11.51	04-06-1998
	US-6,020,592	02-01-2000	LIEBERT ET AL.	250	492.21	08-03-1998
	US-6,041,735	03-28-2000	MURZIN ET AL.	118	723	03-02-1998
	US-6,050,218	04-18-2000	CHEN ET AL.	118	723	09-28-1998
	US-6,076,483	06-20-2000	SHINTANI ET AL.	118	723	03-26-1998
	US-6,101,971	08-15-2000	DENHOLM ET AL.	118	723	12-22-1998
	US-6,132,552	10-17-2000	DONOHOE ET AL.	156	345	02-19-1998
	US-6,150,628	11-21-2000	SMITH ET AL.	219	121.54	06-26-1997
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	US-6,165,376	12-26-2000	MIYAKE ET AL.	216	67	01-05-1998
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	US-6,239,553 B1	05-29-2001	BARNES ET AL.	315	111.51	04-22-1999
	US-6,291,938 B1	09-18-2001	JEWETT ET AL.	315	111.51	01-24-2000
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DISCLOSURE  
STATEMENT BY APPLICANT

Sheet 6 of 6

Application Number: 10/646,533  
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 First Named Inventor: Kenneth COLLINS, et al.  
 Group Art Unit: Unknown  
 Examiner Name: Unknown  
 Attorney Docket Number: 008401 02



U. S. PATENT DOCUMENTS

Examiner Initials	Document No	Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date
	US-6,300,643 B1	10-09-2001	FANG ET AL.	250	492.21	12-06-1999
	US-6,305,316 B1	10-23-2001	DIVERGILIO ET AL.	118	723	07-20-2000
	US-6,335,536 B1	01-01-2002	GOECKNER ET AL.	250	492.3	10-27-1999
	US-6,339,297 B1	01-15-2002	SUGAI ET AL.	315	111.21	07-21-1999
	US-6,341,574 B1	01-29-2002	BAILEY III ET AL.	118	723	11-15-1999
	US-6,348,126 B1	02-19-2002	HANAWA ET AL.	156	345	08-11-2000
	US-6,403,453 B1	06-11-2002	ONO ET AL.	438	513	07-27-2000
	US-6,410,449 B1	07-25-2002	HANAWA ET AL.	438	708	08-11-2000
	US-6,418,874 B1	07-16-2002	COX ET AL.	118	723	05-25-2000
	US-6,433,553 B1	08-13-2002	GOECKNER ET AL.	324	464	10-27-1999
	US-6,453,842 B1	09-24-2002	HANAWA ET AL.	118	723	08-11-2000
	US-6,468,388 B1	10-22-2002	HANAWA ET AL.	156	345.48	08-11-2000
	US-6,494,986 B1	12-17-2002	HANAWA ET AL.	156	345.35	08-11-2000
	US-6,514,838 B2	02-04-2003	CHAN	438	513	06-27-2001
	US-6,551,446 B1	04-22-2003	HANAWA ET AL.	156	345.48	08-11-2000
	US-6,559,408 B2	05-06-2003	SMITH ET AL.	219	121.57	05-10-2002
	US 2001/0042827 A1	11-22-2001	FANG ET AL.	49	00	07-27-2001
	US 2002/0047543 A1	04-25-2002	SUGAI ET AL.	315	111.21	10-10-2001

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Date Considered:

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Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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# TRANSMITTAL FORM

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Total Number of Pages in This Submission

9

Application Number	10/646,533
Filing Date	08/22/2003
First Named Inventor	Kenneth COLLINS, et al.
Group Art Unit	N/A
Examiner Name	Unknown
Attorney Docket Number	8401 02

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
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<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Robert M. Wallace	Reg. No. 29,119
Signature		
Date	09/18/2003	

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:

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